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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,287	07/09/2003	Hiroyuki Takahashi	16816	9906

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EXAMINER

JOHNSON III, HENRY M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/616,287	Applicant(s) TAKAHASHI, HIROYUKI	
	Examiner Henry M. Johnson, III	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed June 24, 2005, with respect to claims 6-12 have been fully considered and are persuasive. The rejection of claims 6-12 has been withdrawn, however, a new rejection is cited herein.

The common assignment of Honda et al. is acknowledged. **Accordingly, the finality of the last Office Action is withdrawn.**

Applicant's arguments with respect to claims 1-5 and 13-20 have been considered but are moot in view of the new ground(s) of rejection. The "means for" language in the claims allows for broad interpretation of the claims as set for in MPEP § 2181; The USPTO must apply 35 U.S.C. 112, sixth paragraph in appropriate cases, and give claims their broadest reasonable interpretation, in light of and consistent with the written description of the invention in the application. See *Donaldson*, 16 F.3d at 1194, 29 USPQ2d at 1850 (stating that 35 U.S.C. 112, sixth paragraph "merely sets a limit on how broadly the PTO may construe means-plus-function language under the rubric of reasonable interpretation.").

Regarding information about the connected devices, Bauer et al. disclose that each device has its own address on the communications bus, thus implicitly providing continuous information on the connected device to the bus.

Bauer et al. do imply providing decision data to other devices. When a decision is made to inhibit a monopolar device because a bipolar device is operating, some means must be provided to the monopolar control to implement the inhibition if the local switch is activated.

Specification

The disclosure is objected to because of the following informalities: the terms double foot switch and triple foot switch are included in the specification. The applicant in a previous

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response indicated these were duplex and triplex switch assemblies, yet they are shown connected to only one device each, making the intent unclear.

Appropriate correction is required.

Drawings

The drawings are objected to because in figures 3 and 4 the terms double foot switch and triple foot switch are included in the labels, yet each switch is connected to a single device. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-7 and 13-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent 5,788,688 to Bauer et al. Bauer et al. disclose a surgical apparatus that integrates multiple surgical devices (abstract) using a computer system (Fig. 3, # 78) with standard interfaces for communication with the devices (IEEE-488 or RS-485). Each device includes a microprocessor to control the treatment device and communicate to other devices via the communication bus. The devices may be actuated by switches (panel or foot). The following limitations are identified as invoking 35 USC 112, sixth paragraph regarding “means for” claims.

A communication **means** is provided by the communications bus for providing communications between the host computer and other devices on the bus.

Driving control information transmission **means** is provided by the microprocessor within the device via the bus. The host processor is broadly interpreted as a medical device as it is central to the medical system and is disclosed as capable of determination of what devices may operate simultaneously.

Control information determining reply **means** is provided by the microprocessor in each device as it receives control information via the bus and is disclosed as having limit values in memory that can be used to generate error signals, an error signal being interpreted as non-permission and the lack of an error signal being interpreted as permission. The error signal is the reply transmitted on the bus. Additionally, this means is provided by the host processor that provides this functionality to each of the devices via the communications bus.

Driving control decision **means** is provided by the host computer that provides operational information via the bus to each device. The computer clearly has the capability to

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deny operation as indicated by prohibiting operation of monopolar and bipolar devices simultaneously (Col. 16, lines 1-5). This is interpreted as functionally equivalent to the permission/non-permission of the application.

Regarding claim 5, means for transmitting switch data is via the bus. Since the host is disclosed as prohibiting operation of bipolar and monopolar simultaneously, it must receive switch information from the "first" device and communicate (reply to) with the "second" device that it may not operate. This provides the means to distinguish permissions. If the "second" device is switch activated, its microprocessor would evaluate its switch information and the signal from the first device and decide its own control.

Regarding claim 6, each device is disclosed as having a unique address on the bus thus providing the host processor the means to distinguish the individual devices.

Regarding claims 13-20, Bauer et al. teaches multiple medical devices (up to four, plus the host processor) connected by a communications bus, each with its own microprocessor (communications unit and decision unit). The communications units are capable of conveying information and the decision unit (s) are capable of operate/do not operate decisions based on switch information. The amplifying functional language is intended use, however, these functionalities have been addressed in previous rejections when the claim were in the "means for" format.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,788,688 to Bauer et al. in view of U.S. Patent 5,502,726 to Fischer. Bauer et al. are discussed above, but do not disclose timeouts. The use of timeout circuits and watchdog timers is well known in the art as evidenced by the Fischer patent that teaches a medical network that uses a watchdog timer (Fig. 5, # 526) to check for timeliness of data transfers and to initiate a program sequence in the event of a timeout. Watchdog timers are designed to detect abnormal conditions by looking for a recurring signal. Action is initiated if the signal is not detected. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the timeout circuits as taught by Fischer in the system of Bauer et al. to insure system integrity.

Regarding claim 4, Bauer et al. teach activation of the devices by hand or foot switches (Fig. 8) and that status information is communicated to the processor.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,788,688 to Bauer et al. Bauer et al. are discussed above and further disclose that surgical systems equipment may include such devices as electrosurgical devices, insufflation devices, irrigation/suction pumps, and lasers. It is implicit the electrosurgical device uses a current source as both bipolar and monopolar devices are disclosed and the pumps associated with insufflation, irrigation and suction devices likewise is implicit. Each is disclosed as including means for switching, control and communications (Figs. 6, 8 and 9). Ultrasonic devices are not specifically taught, but are well known in the art and would obviously require a driving mechanism. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an ultrasonic device in the system of Bauer et al. if such

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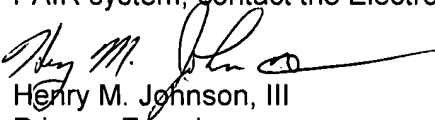
functionally was required in the procedure as such instruments are well known and in common use in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Henry M. Johnson, III
Primary Examiner
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